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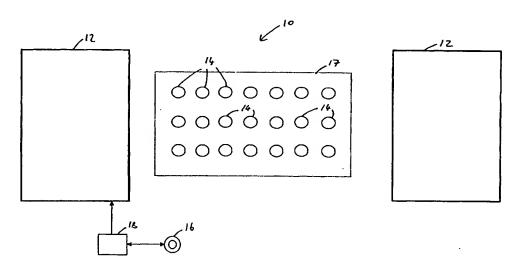
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(54) Title: A DATA ACQUISITION UNIT, SYSTEM AND METHOD FOR GEOPHYSICAL DATA



(57) Abstract: A data acquisition system for gathering geophysical data, a corresponding method, and a data acquisition unit for use with the system and method are disclosed. The system (10) comprises a plurality of data acquisition units (14) for gathering geophysical data, each data acquisition unit (14) being connectable to at least one sensor (15) and being arranged, during use, to gather geophysical data from the at least one sensor (15). Each data acquisition unit (14) comprises time referencing means (48) arranged to generate time reference data usable to control the time at which samples of geophysical data are taken. The system (10) further comprises means for calculating spatial derivatives between samples associated with adjacent sensors (15) connected during use to the data acquisition units (14).